

What is claimed is:

1. A form for fabricating tilt-up concrete wall sections, said form comprising:

a frame formed by a plurality of spaced apart frame members attached together at their ends;

a reinforcing mat formed by crisscrossed reinforcing members, said reinforcing mat being disposed within said frame with ends of its reinforcing members located adjacent respective ones of said frame members;

a plurality of brackets slidably disposed on the ends of at least some of said reinforcing members, each of said brackets securing the end of its respective reinforcing member and being fixed to said frame member to hold said reinforcing mat in place within said frame member and to provide structural integrity to said form.

2. A form for fabricating tilt-up concrete wall sections as claimed in claim 1 and wherein said frame members are made of metal.

3. A form for fabricating tilt-up concrete wall sections as claimed in claim 2 and wherein each of said frame members is generally C-shaped having flanges that extend inwardly toward the interior of said frame.

4. A form for fabricating tilt-up concrete wall sections as claimed in claim 3 and wherein said reinforcing mat is sized to be moved into said frame past said inwardly extending flanges.

5. A form for fabricating tilt-up concrete wall sections as claimed in claim 4 and wherein said C-shaped frame members form an inwardly facing channel defined by an outside panel portion of said frame members and said inwardly extending flanges, and wherein said brackets are slidable on said reinforcing members to be slid against and attached to said outside panel portions of said frame members after said reinforcing mat is moved into said frame.

6. A form for fabricating tilt-up concrete wall sections as claimed in claim 5 and wherein said brackets are fixed to the end portions of said reinforcing members after having been slid against and attached to said outside panel portions of said frame members.

7. A form for fabricating tilt-up concrete wall sections as claimed in claim 6 and wherein said reinforcing members are rebar arranged in a crisscrossed pattern to form said reinforcing mat, said brackets being disposed on the ends of at least some of said rebars.

8. A form for fabricating tilt-up concrete wall sections as claimed in claim 2 and wherein said frame members further are formed with down turned lips.

9. A form for fabricating tilt-up concrete wall sections as claimed in claim 8 and wherein said brackets are configured with alignment tabs that fit between said down turned lips to align said reinforcing mat within said frame.

10. A form for fabricating tilt-up concrete wall sections as claimed in claim 9 and wherein said brackets are stamped from sheet metal and have a ribbed pocket for receiving and holding the end portions of said reinforcing members.

11. A concrete form comprising a frame made up of generally channel shaped frame members attached together at their ends so that their channels face inwardly, a reinforcing mat made of crisscrossed reinforcing members disposed in the frame, and a plurality of brackets disposed on ends of at least some of said reinforcing members, said brackets being fixed within said channels of said frame members and holding the ends of said reinforcing members to secure the reinforcing mat within the frame.

12. A concrete form as claimed in claim 11 and wherein said frame members are formed of metal.

13. A concrete form as claimed in claim 12 and wherein said frame members are formed of roll formed sheet metal.

14. A concrete form as claimed in claim 12 and wherein said brackets are slidably disposed on the ends of said reinforcing members prior to installation of said reinforcing mat in said frame, said brackets being slid outwardly and attached to said channel when said reinforcing mat is disposed in said frame.

15. A concrete form as claimed in claim 14 and wherein said brackets are spot welded in said channels.

16. A concrete form as claimed in said 15 and wherein said brackets are further spot welded to the ends of their respective reinforcing members after being welded in said channels.

17. A method of fabricating a concrete form comprising the steps of:

(a) forming a frame from a plurality of frame members attached together at their ends, the frame members forming sides of the frame;

(b) forming a reinforcing mat from a plurality of reinforcing members having ends, said reinforcing mat being sized and configured to be moved into said frame with the ends of said reinforcing members located adjacent respective ones of said frame members;

(c) slidably disposing brackets on the ends of at least some of the reinforcing members of the mat;

(d) positioning the reinforcing mat in the frame;

(e) sliding the brackets outwardly on their reinforcing members until they engage respective frame members; and

(f) securing the brackets to the frame members to mount the reinforcing mat within the frame.

18. The method of claim 17 and wherein step (b) comprises arranging a plurality of rebars in crisscrossed relationship, and attaching them together at their intersections.

19. The method of claim 17 and further including securing the brackets to the ends of their respective reinforcing members as well as to the frame members.

20. The method of claim 19 and wherein the steps of securing the brackets include welding the brackets to the frame members and to the ends of their respective reinforcing members.

21. The method of claim 17 and where in step (a) the frame members are channel shaped.

22. The method of claim 21 and wherein the channels of the channel shaped frame members face inwardly.

23. The method of claim 22 and where in step (e) the brackets are slid outwardly into the channels of the frame members, the channels positioning the brackets to center the reinforcing mat in the frame.

24. A form for fabricating tilt-up concrete wall sections comprising:

a frame formed from a plurality of metal frame members, each frame member forming a side of the frame;

a mat of reinforcing members sized and configured to fit in said frame with the ends of said reinforcing members located adjacent respective ones of said frame members; and

a plurality of brackets disposed on the ends of at least some of said frame members;

said plurality of brackets abutting and being fixed to said frame members to position and hold said reinforcing mat in said frame and to provide structural integrity to said form.

25. A form for fabricating tilt-up concrete wall sections as claimed in claim 24 and wherein said reinforcing members comprise lengths of rebar arranged in a crisscross pattern to form said reinforcing mat.

26. A form for fabricating tilt-up concrete wall sections as claimed in claim 25 and wherein said brackets are slidably disposed on the ends of their respective rebars for being slid outwardly into abutment with said frame members prior to being fixed thereto.

27. A form for fabricating tilt-up concrete wall sections as claimed in claim 26 and wherein said brackets are welded to said frame members after having been slid into abutment therewith.

28. A form for fabricating tilt-up concrete wall sections as claimed in claim 27 and wherein said brackets are also welded to the ends of their respective rebars.

29. A form for fabricating tilt-up concrete wall sections as claimed in claim 24 and wherein said frame members are profiled to provide rigidity.

30. A form for fabricating tilt-up concrete wall sections as claimed in claim 29 and wherein said profiled frame members are generally channel shaped.

31. A form for fabricating tilt-up concrete wall sections as claimed in claim 30 and wherein the channels of said channel shaped frame members face inwardly.

32. A form for fabricating tilt-up concrete wall sections as claimed in claim 31 and wherein said brackets are captured within said channels of said frame members to center said mat of reinforcing members within said frame.

33. A method of forming a tilt-up concrete wall comprising the steps of:

constructing a frame from a plurality of metal frame members, said frame members forming the sides of the frame;

constructing a mat from a plurality of reinforcing members having ends, the mat being sized and configured to be positioned within said frame with the ends of the reinforcing members located adjacent respective ones of said frame members;

slidably disposing a plurality of brackets on the ends of at least some of said reinforcing members;

positioning the mat in the frame;

sliding the reinforcing members outwardly on the ends of their respective reinforcing members and into engagement with the frame members;

attaching the brackets to the frame members to fix and position the mat of reinforcing members within the frame and to provide structural integrity to the frame;

locating the frame on a casting surface;

filling the frame with concrete; and

when the concrete is cured, tilting the resulting concrete wall, including the frame, into place to form a wall.

34. The method of claim 33 and wherein the reinforcing members are rebars arranged in a crisscrossed pattern to form the mat.

35. The method of claim 34 and wherein the rebars are attached together at their intersections.

36. The method of claim 35 and wherein the brackets attached to the ends of their respective rebars as well as being attached to the frame members.

37. The method of claim 36 and wherein the brackets are welded to the ends of their rebars and to the frame members.